

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES
(Attorney Docket № 14184US02)**

In the Application of:

Ed H. Frank

Serial № 10/658,142

Filed: September 9, 2003

For: METHOD AND SYSTEM FOR
LOCATION BASED CONFIGURATION
OF A WIRELESS ACCESS POINT
(WAP) AND AN ACCESS DEVICE IN A
HYBRID WIRED/WIRELESS
NETWORK

Examiner: Jung H. Park

Group Art Unit: 2465

Confirmation № 5401

Electronically filed on January 26, 2011

APPEAL BRIEF

Mail Stop Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This is an appeal from an Office Action dated October 26, 2010 ("Final Office Action"), in which claims 1-32 were finally rejected. The Appellant respectfully requests that the Board of Patent Appeals and Interferences ("Board") reverses the final rejection of claims 1-32 of the present application. The Appellant notes that this Appeal Brief is timely filed within the period for reply that ends on January 26, 2011.

REAL PARTY IN INTEREST
(37 C.F.R. § 41.37(c)(1)(i))

Broadcom Corporation, a corporation organized under the laws of the state of California, and having a place of business at 5300 California Avenue, Irvine, California 92617, has acquired the entire right, title and interest in and to the invention, the application, and any and all patents to be obtained therefor, as set forth in the Assignment recorded at Reel 014225, Frame 0118 in the PTO Assignment Search room.

RELATED APPEALS AND INTERFERENCES
(37 C.F.R. § 41.37(c)(1)(ii))

The Appellant is unaware of any related appeals or interferences.

STATUS OF THE CLAIMS
(37 C.F.R. § 41.37(c)(1)(iii))

The present application includes claims 1-32, all of which stand rejected. Claims 1-7, 9, 11-17, 19, 21-27, 29, 31 and 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,042,867 ("Whitehill"). (See Final Office Action, p. 2.) Claims 8, 18, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of U.S. Patent No. 7,433,691 ("White"). (See *id.*, p. 5.) Claims 10, 20 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of U.S. Patent No. 7,200,673 ("Augart"). (See *id.*, p. 6.) The Appellant identifies claims 1-32 as the claims that are being appealed. The text of the pending claims is provided in the Claims Appendix.

STATUS OF AMENDMENTS
(37 C.F.R. § 41.37(c)(1)(iv))

The Appellant has not amended any claims subsequent to the final rejection of claims 1-32 mailed on October 26, 2010.

SUMMARY OF CLAIMED SUBJECT MATTER
(37 C.F.R. § 41.37(c)(1)(v))

Independent claim 1 recites the following:

A method for providing location based configuration in a hybrid wired/wireless network, the method comprising:¹

identifying a location of a network device² within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;³

determining, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device;⁴ and

communicating said determined configuration information to said network device for providing location based configuration of said network device.⁵

¹ See, e.g., Application, p. 8, ¶ 20, lines 1-2.

² See, e.g., *id.*, p. 8, ¶ 20, lines 8-9; see also, *id.*, Fig. 3, switches 306, 308, access points (APs) 310, 312, 314, 316, 318, 320 and access devices 322, 324, 326, 328, 330, 332, 334, 336, 338.

³ See, e.g., *id.*, p. 8, ¶ 20, lines 3-5; see also, *id.*, p. 17, ¶ 49, lines 1-4; see also, *id.*, p. 15, ¶ 52, line 1 to p. 20, ¶ 50, line 9; see also, *id.*, p. 21, ¶ 57, lines 4-5; see also, *id.*, Fig. 4, Step 406.

⁴ See, e.g., *id.*, p. 8, ¶ 20, lines 5-6; see also, *id.*, p. 17, ¶ 49, lines 4-15; see also, *id.*, p. 18, ¶ 51, lines 1-14; see also, *id.*, p. 21, ¶ 57, lines 5-6; see also, *id.*, Fig. 4, Step 408.

⁵ See, e.g., *id.*, p. 8, ¶ 20, lines 6-8; see also, *id.*, p. 17, ¶ 49, lines 11-15; see also, *id.*, p. 12, ¶ 57, lines 6-7; see also, *id.*, Fig. 4, Step 410.

Independent claim 11 recites the following:

A machine-readable storage, having stored thereon a computer program having at least one code section for providing location based configuration in a hybrid wired/wireless network testing, the at least one code section executable by a machine for causing the machine to perform the steps comprising:⁶

identifying a location of a network device⁷ within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;⁸

determining, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device;⁹ and

communicating said determined configuration information to said network device for providing location based configuration of said network device.¹⁰

Independent claim 21 recites the following:

A system for providing location based configuration in a hybrid wired/wireless network, the system comprising:¹¹

⁶ See, e.g., *id.*, ¶ 23, lines 1-5.

⁷ See, e.g., *id.*, p. 8, ¶ 20, lines 8-9; see also, *id.*, Fig. 3, switches 306, 308, access points (APs) 310, 312, 314, 316, 318, 320 and access devices 322, 324, 326, 328, 330, 332, 334, 336, 338.

⁸ See, e.g., *id.*, p. 8, ¶ 20, lines 3-5; see also, *id.*, p. 17, ¶ 49, lines 1-4; see also, *id.*, p. 15, ¶ 52, line 1 to p. 20, ¶ 50, line 9; see also, *id.*, p. 21, ¶ 57, lines 4-5; see also, *id.*, Fig. 4, Step 406.

⁹ See, e.g., *id.*, p. 8, ¶ 20, lines 5-6; see also, *id.*, p. 17, ¶ 49, lines 4-15; see also, *id.*, p. 18, ¶ 51, lines 1-14; see also, *id.*, p. 21, ¶ 57, lines 5-6; see also, *id.*, Fig. 4, Step 408.

¹⁰ See, e.g., *id.*, p. 8, ¶ 20, lines 6-8; see also, *id.*, p. 17, ¶ 49, lines 11-15; see also, *id.*, p. 12, ¶ 57, lines 6-7; see also, *id.*, Fig. 4, Step 410.

¹¹ See, e.g., *id.*, p. 9, ¶ 24, lines 1-2.

an identifier adapted to identify a location of a network device¹² within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;¹³

a determinator adapted to determine, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device;¹⁴ and

a communicator adapted to communicate said determined configuration information to said network device for providing location based configuration of said network device.¹⁵

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL
(37 C.F.R. § 41.37(c)(1)(vi))

Claims 1-7, 9, 11-17, 19, 21-27, 29, 31 and 32 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Whitehill. (See Final Office Action, p. 2.) Claims 8, 18, and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of White. (See *id.*, p. 5) Claims 10, 20 and 30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitehill in view of Augart. (See *id.*, p.6.)

¹² See, e.g., *id.*, p. 9, ¶ 24, lines 7-8; see also, *id.*, Fig. 3, switches 306, 308, access points (APs) 310, 312, 314, 316, 318, 320 and access devices 322, 324, 326, 328, 330, 332, 334, 336, 338.

¹³ See, e.g., *id.*, p. 9, ¶ 24, lines 2-4; see also, *id.*, p. 17, ¶ 49, lines 1-4; see also, *id.*, p. 15, ¶ 52, line 1 to p. 20, ¶ 50, line 9; see also, *id.*, p. 21, ¶ 57, lines 4-5; see also, *id.*, Fig. 4, Step 406.

¹⁴ See, e.g., *id.*, p. 9, ¶ 24, lines 2-5; see also, *id.*, p. 17, ¶ 49, lines 4-15; see also, *id.*, p. 18, ¶ 51, lines 1-14; see also, *id.*, p. 21, ¶ 57, lines 5-6; see also, *id.*, Fig. 4, Step 408.

¹⁵ See, e.g., *id.*, p. 9, ¶ 24, lines 5-7; see also, *id.*, p. 17, ¶ 49, lines 11-15; see also, *id.*, p. 12, ¶ 57, lines 6-7; see also, *id.*, Fig. 4, Step 410.

ARGUMENT
(37 C.F.R. § 41.37(c)(1)(vii))

I. CLAIMS 1-7, 9, 11-17, 19, 21-27, 29, 31 AND 32 ARE PATENTABLE OVER WHITEHILL

A claim is anticipated only if each and every element set forth in the claim is found, either expressly or inherently, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628, 631 (Fed. Cir. 1987); *see also*, MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236 (Fed. Cir. 1989); *see also*, MPEP § 2131. To anticipate, a reference must “**clearly and unequivocally disclose the claimed [invention]** or direct those skilled in the art to the [invention] **without any need for picking, choosing and combining various disclosures not directly related to each other by the teachings of the cited reference.**” *Akzo v. U.S. Int'l. Trade Comm'n.*, 808 F.2d 1471, 1480 (Fed. Cir. 1986).¹⁶ In other words, to be anticipatory, the prior art reference “must not only disclose all elements of the claim within the four corners of the document, **but must also disclose those elements 'arranged as in the claim.'**” *Net MoneyIN, Inc. v. Verisign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008), quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983).

With these principles in mind, the Appellant now turns to the claim rejections in particular. Namely, the Appellant turns to the rejection of claims 1-7, 9, 11-17, 19, 21-27, 29, 31 and 32 under 35 U.S.C. § 102(e) as being anticipated by Whitehill.

¹⁶ Emphasis added except where noted otherwise.

Without conceding that Whitehill qualifies as prior art under 35 U.S.C. § 102(e), the Appellant respectfully traverses this rejection as follows.

A. Rejection of Independent Claim 1 under 35 U.S.C. § 102(e)

With regard to the rejection of independent claim 1, the Appellant submits that Whitehill does not disclose or suggest at least the limitation of "determining, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device," as recited by the Applicant in independent claim 1.

The Office Action states the following:

Regarding claim 1, Whitehill discloses a method for providing location based configuration in a hybrid wired/wireless network, the method comprising:

- identifying a location of a network device (determining the geographic location of user nodes, see col.3, Ins.29-43) within the hybrid wired/wireless network (fig.1), the network device being movable within the hybrid wired/wireless network (mobile nodes, see 103 & 102 fig.1);
- determining, outside of the network device, configuration information for the network device (determining configuration information for the mobile node at Access Point or AAA server, see fig.7), the configuration information corresponding to the determined location of the network device (the configuration information is related with the location of the mobile node, see fig.7); and
- communicating the determined configuration information to the network device for providing location based configuration of the network device (messages sent to the mobile node, see fig. 7).

(Final Office Action, at pp. 2-3.) The Appellant disagrees with the Examiner's assessment of Whitehill.

Whitehill discloses a system and method for providing security to a wireless network by using a mobile node's location as a parameter for deciding if access is to be

given to the node. More specifically, an 802.11 authentication server (e.g., AAA 105 in Fig. 1) can request a wireless router (e.g., 102-1 in Fig. 1) or access point (e.g., 101-1 in Fig. 1) to take time of flight measurements and report either the time of flight or the calculated distance for a remote node (e.g., 103-1 in Fig. 1). The authentication server can then determine if the location of the wireless user/node is within a defined space, such as a building outline, and the authentication server may reject users that are outside the perimeter. (See Whitehill, Figs. 3-6 and 5:59-6:49.)

Whitehill, at Fig. 7, simply discloses an exemplary flow of messages between devices during the authorization process. More specifically, as part of the authentication process, the AAA server 105 sends a message to the access point 101 requesting the range information of the mobile node 103-2, such as the location of the wireless router 102-1, and the distance between the wireless router and the mobile device 103-2. The access point 101 receives the message from the AAA server and sends a request to the wireless router 102-1 to determine the distance between the mobile device 103-2 and the wireless router 102-1. The wireless router 102-1 executes a series of measurements, such as time of flight measurements, and determines the requested distance information, which is then sent to the AAA server 105 via the access point 101. **The AAA server then calculates a position for the mobile node 103-2 and determines if the mobile node is within a secure zone 118-1, that is, within a zone in which network access by mobile nodes is allowed. In this regard, even though Whitehill determines the location of the mobile node 103-2, such location information is simply used to grant or deny access to the wireless network based on the determined location information. The location information is not used for**

purposes of device configuration. In fact, Whitehill does not disclose that any location-based configuration information is being communicated to the mobile node 103-2 after its location is determined.

The Office Action also states the following with regard to the rejection based on Whitehill:

At pages 12-14, with respect to claim 1, applicant argues that Whitehill fails to disclose "determining, outside of the network device, configuration information for the network device, the configuration information corresponding to the determined location of the network device" by saying that "Whitehill determines the location of the mobile node, such location information is simply used to grant or deny access to the wireless network based on the determined location information. The location information is not used for purpose of device configuration."

In reply, what is the meaning of configuration? The definition of configuration in the art is that a) the way in which a computer system is set up; b) the way that the components of a computer network are connected.

As acknowledged by the applicant, the location information is analyzed at AAA server and grant or deny for the mobile node to access to the wireless network. That is, AAA server, outside of the network device, determines grant or deny of the mobile node based on the determined location information. **Determining grant or deny of mobile node based on the location information is equivalent to determining configuration information for the mobile network device.** Figure 7 of Whitehill, further, discloses the method of determining configuration information for the network device such as "determining if mobile node is in the secure range of the reporting fixed device, if not, perform location analysis." That is, the limitation of "determining configuration information for the network device" read on "determine if mobile nodes is in the secure area based on the location information (further see, col.6, ln.50 - col.7, ln.46)." Therefore, the examiner respectively disagrees.

(Final Office Action, p. 7.) The Appellant disagrees that Whitehill discloses "determining . . . configuration information for said network device." In this regard, Examiner's interpretation of the claimed "configuration information" is incorrect because it is

inconsistent with how a person of ordinary skill in the art would interpret this limitation in light of the specification. *See, e.g., In re Am. Acad. Of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004) (“The USPTO is required to give pending claims “their broadest reasonable interpretation consistent with the specification.”); *see also In re Moore*, 439 F. 2d 1232, 1235 (CCPA 1971) (Claim language “**must be analyzed**—not in a vacuum, but always **in light** of the teachings of the prior art and **of the particular application disclosure as it would be interpreted by one possessing the ordinary level of skill in the pertinent art.**”) In this regard, the specification states as follows:

In one embodiment of the invention, a network device, such as any one of access points (APs) 310, 312, 314, 316, 318, 320 and/or switches 306, 308, may be configured to determine, for example, a geographical location such as a country or region in which it may be located. Accordingly, an access point and/or switch may be adapted to inform a client of various access rules and methodologies required for communication over a network to which it may be connected. The client may be an access device such as any one of access devices 322, 324, 326, 328, 330, 332, 334, 336, 338. **In one aspect of the invention, the access point and/or switch may be adapted to inform the access device or client of, for example, various bandwidth etiquette and sharing rules, available channels, a best channel list, available protocols, etc.** The location of, for example, an access device may also be domain based. Hence, as an access device moves from a first network domain to second network domain, configuration changes may be provided to the access device. Accordingly, configuration information related to the second network domain may be provided to the access device.

(Application, ¶ 49.) Likewise, original application claim 9 reads as follows:

The method according to claim 1, wherein said **determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.**

Accordingly, in light of the specification, one of ordinary skill in the art would not understand “determining . . . configuration information,” as recited in claim 1, to be

equivalent to "determining [to] grant or deny of mobile node based on the location information," as alleged by the Examiner. Likewise, one of ordinary skill in the art would not understand "determining . . . configuration information," as recited in claim 1, to be equivalent to "determining if mobile node is in the secure range of the reporting fixed device, if not, perform location analysis," as alleged by the Examiner.

In sum, Whitehill does not disclose or suggest that location information is for purposes of device configuration. Rather, Whitehill merely uses the determined location information to grant or deny access to the wireless network. In fact, Whitehill does not disclose that any location-based configuration information is being communicated to the mobile node 103-2 after its location is determined.

Accordingly, independent claim 1 is not anticipated by Whitehill and is allowable. Independent claims 11 and 21 are similar in relevant respects to the method disclosed in independent claim 1. Therefore, independent claims 11 and 21 are also allowable over Whitehill for at least the same reasons stated above with regard to claim 1.

B. Rejection of Dependent Claims 2, 12 and 22

Claim 2 depends on independent claim 1. Therefore, claim 2 is allowable over Whitehill at least for the reasons stated above with regard to claim 1.

Claims 12 and 22 are similar in relevant respects to the method disclosed in claim 2. Therefore, the Appellant submits that claims 12 and 22 are also allowable over Whitehill at least for the reasons stated above with regard to claim 2.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 2, 12 and 22.

C. Rejection of Dependent Claims 3, 13 and 23

Claim 3 depends on independent claim 1. Therefore, claim 3 is allowable over Whitehill at least for the reasons stated above with regard to claim 1.

Whitehill also fails to disclose or suggest “discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device,” as recited by the Appellant in claim 3. As discussed above in regard to claim 1, Whitehill fails to disclose or suggest determining configuration information. In particular, the Examiner’s interpretation of the claimed “configuration information” is contrary to how this term would be interpreted by one of ordinary skill in the art. Accordingly, since Whitehill fails to disclose or suggest “determining . . . configuration information,” it necessarily cannot disclose “discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device,” as recited by the Appellant in claim 3.

The Final Office Action states the following with regard to claim 3:

Regarding claim 3, Whitehill discloses, “discovering configuration information from at least one of a database, and a memory associated with at least one of the access point and the switching device (col. 5, Ins. 28-51 and fig.7).”

(Final Office Action, p. 3.) The passage of Whitehill cited by the Examiner reads as follows:

As shown in FIG. 2, each access point 101, wireless routers 102 and mobile node 103 includes at least one transceiver 106 and at least one controller 107. Each transceiver 106 is coupled to an antenna 109 and can transmit and receive data packets over any frequency band, for example, over the 2nd Institutional Scientific Medical (ISM) band.

The frequency and modulation scheme used by the transceiver 106 however, do not impact the implementation of the mobile access points 101, wireless routers 102, or nodes 103. Each node 101, 102 and 103 further includes a memory 108, such as a random access memory (RAM), that is capable of storing, among other things, routing information pertaining to itself and other nodes in the network 100. Certain nodes, in particular, mobile nodes 103-1 through 103-n, can be coupled to a host device 110, such as a personal computer (PC), personal data assistant (PDA), or any other suitable device for use by a user.

(Whitehill, 5:28-51.) Although the above passage discloses that “each node 101, 102 and 103 further includes a memory 108, such as a random access memory (RAM), that is capable of storing, among other things, routing information pertaining to itself and other nodes in the network 100,” nothing in this passage or elsewhere in Whitehill discloses or suggests “discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device,” as recited by the Appellant in claim 3.

Accordingly, claim 3 is patentable over Whitehill for at least the above reasons.

Claims 13 and 23 are similar in relevant respects to the method disclosed in claim 3. Therefore, the Appellant submits that claims 13 and 23 are also allowable over Whitehill at least for the reasons stated above with regard to claim 3.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 3, 13 and 23.

D. Rejection of Dependent Claims 4, 14 and 24

Claim 4 depends on claim 3, which in turn depends on independent claim 1. Therefore, claim 4 is allowable over Whitehill for at least the reasons stated above with regard to claims 1 and 3.

In addition, Whitehill fails to disclose or suggest "said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information," as recited by the Appellant in claim 4. In this regard, since Whitehill fails to disclose "discovering configuration information . . . , " as recited in claim 3, it necessarily cannot disclose that "said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information," as recited in claim 4.

The Final Office Action states the following with regard to claim 4:

Regarding claim 4, Whitehill discloses, "the discovering further comprises scanning the database and the memory by the access device, access point and switching device to discover the configuration information (col. 5, Ins. 28-51 and fig. 7)."

(Final Office Action, p. 3.) The passage of Whitehill cited by the Examiner reads as follows:

As shown in FIG. 2, each access point 101, wireless routers 102 and mobile node 103 includes at least one transceiver 106 and at least one controller 107. Each transceiver 106 is coupled to an antenna 109 and can transmit and receive data packets over any frequency band, for example, over the 2nd Institutional Scientific Medical (ISM) band.

The frequency and modulation scheme used by the transceiver 106 however, do not impact the implementation of the mobile access points 101, wireless routers 102, or nodes 103. Each node 101, 102 and 103 further includes a memory 108, such as a random access memory (RAM), that is capable of storing, among other things, routing information pertaining to itself and other nodes in the network 100. Certain nodes, in particular, mobile nodes 103-1 through 103-n, can be coupled to a host device 110, such as a personal computer (PC), personal data assistant (PDA), or any other suitable device for use by a user.

(Whitehill, 5:28-51.) This passage merely discloses that “each node 101, 102 and 103 further includes a memory 108, such as a random access memory (RAM), that is capable of storing, among other things, routing information pertaining to itself and other nodes in the network 100.” Nothing in this passage or elsewhere in Whitehill discloses or suggests “discovering configuration information . . .,” let alone disclose that “said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information,” as recited in claim 4.

Accordingly, claim 4 is patentable over Whitehill for at least the above reasons.

Claims 14 and 24 are similar in relevant respects to the method disclosed in claim 4. Therefore, the Appellant submits that claims 14 and 24 are also allowable over Whitehill at least for the reasons stated above with regard to claim 4.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 4, 14 and 24.

E. Rejection of Dependent Claims 5, 15 and 25

Claim 5 ultimately depends on independent claim 1. Therefore, claim 5 is allowable over Whitehill for at least the reasons stated above with regard to claim 1.

Whitehill also fails to disclose or suggest at least the limitation of “said determining comprises scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information.” In this regard, since Whitehill fails to disclose “determining . . . configuration information,” as recited in claim 1, it necessarily cannot disclose that “said determining comprises scanning at

least one RF channel by at least one of said access point and said access device to discover said configuration information," as recited in claim 5.

The Final Office Action states the following with regard to claim 5:

Regarding claim 5, Whitehill discloses, "the determining further comprises scanning at least one RF channel by at least one of the access point and the access device to discover the configuration information (fig.1-2, col. 4, Ins. 42-43; further see col. 1, ln. 38)."

(Final Office Action. p. 3.) In context, the passages of Whitehill cited by the Examiner read as follows:

Specifically, a terrestrial cellular network includes a plurality of interconnected base stations that are distributed geographically at designated locations throughout the service area. Each base station includes one or more transceivers that are capable of transmitting and receiving electromagnetic signals, such as radio frequency (RF) communications signals, to and from user nodes, such as wireless telephones, located within the base station coverage area.

* * *

FIG. 4 is a diagram illustrating an example of a network layout with multiple infrastructure devices which have a radio ranges which extend beyond the desired secure area in accordance with an embodiment of the present invention;

(Whitehill, 1:27-41 and 4:40-43.) Although the above-quoted text mentions using RF communication signals, neither it, nor any other portion of Whitehill, discloses or suggests "determining configuration information . . . , let alone that "said determining comprises scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information," as recited in claim 5.

Accordingly, claim 5 is patentable over Whitehill for at least the above reasons.

Claims 15 and 25 are similar in relevant respects to the method disclosed in claim 5. Therefore, the Appellant submits that claims 15 and 25 are also allowable over Whitehill at least for the reasons stated above with regard to claim 5.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 5, 15 and 25.

F. Rejection of Dependent Claims 6, 16 and 26

Claim 6 depends on claim 5, which in turn ultimately depends on independent claim 1. Therefore, claim 6 is allowable over Whitehill for at least the reasons stated above with regard to claims 1 and 5.

Claims 16 and 26 are similar in relevant respects to the method disclosed in claim 6. Therefore, claims 16 and 26 are also allowable over Whitehill for at least the reasons stated above with regard to claim 6.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 6, 16 and 26.

G. Rejection of Dependent Claims 7, 17 and 27

Claim 7 depends on independent claim 1. Therefore, claim 7 is allowable over Whitehill for at least the reasons stated above with regard to claim 1.

In addition, Whitehill fails to disclose or suggest "updating said network device with said communicated configuration information," as recited by the Appellant in claim 7.

The Final Office Action states as follows with regard to the rejection of claim 7:

Regarding claim 7, Whitehill discloses, "updating the network device with the communicated configuration information (maintaining geographic location, see col. 5, Ins. 45-51)."

(Final Office Action, p. 7.) In context, the passage of Whitehill cited by the Examiner reads as follows:

Each access point 101 and wireless router 102 maintains knowledge of their geographic location. This information may be manually entered, or the devices may include positioning functionality, such as global positioning system (GPS) functionality, differential navigation functionality, or other positioning functionality such as various triangulation techniques as can be appreciated by one skilled in the art, or as described in U.S. patent application Ser. No. 09/988,001 referenced above, and in a U.S. patent application of Eric A. Whitehill, Ser. No. 09/973,799, for "A System And Method For Efficiently Performing Two-Way Ranging To Determine The Location Of A Wireless Node In A Communications Network", filed on Oct. 11, 2001, the entire contents of which being incorporated herein by reference

(Whitehill, 5:45-57, where lines 45-51 are underlined.) This passage merely discloses that the access points 101 and wireless routers 102 maintain knowledge of their geographic location. Nothing in this passage or elsewhere in discloses or suggests "determining . . . configuration information," in the manner required by the claims, let alone "updating said network device with said communicated configuration information," as required by claim 7.

Accordingly, claim 7 is patentable over Whitehill for at least the above reasons.

Claims 17 and 27 are similar in relevant respects to the method disclosed in claim 7. Therefore, the Appellant submits that claims 17 and 27 are also allowable over Whitehill at least for the reasons stated above with regard to claim 7.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 7, 17 and 27.

H. Rejection of Dependent Claims 9, 19 and 29

Claim 9 depends on independent claim 1. Therefore, claim 9 is allowable over Whitehill for at least the reasons stated above with regard to claim 1.

Whitehill also fails to disclose or suggest "determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols," as recited by the Appellant in claim 9.

The Final Office Action states the following with regard to the rejection of claim 9:

Regarding claim 9, Whitehill discloses, "the determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols (initial access and authorization complete, i.e., channel/connection available and authorization protocol is setup, see fig.7 and col.7, Ins. 47-55)."

(Final Office Action, p. 9.) The passage of Whitehill cited by the Examiner reads as follows:

In embodiments of the invention described above, security is maintained as the mobile nodes 103 cannot "spoof" the time of flight measurement used, since any attempt at processing the message would only delay the signal's return and effectively cause a greater distance to be calculated. Likewise, the mobile nodes 103 cannot provide an erroneous location since it they never queried for a self-determined location. All location determinations are done by infrastructure devices under control of the network.

(Whitehill, 7:47-55.) The Examiner also cites to Figure 7. However, Figure 7 merely discloses an exemplary flow of messages between devices during the authorization process of Whitehill, which, as discussed above involves providing security to a wireless network by using a mobile node's location as a parameter for deciding if access is to be given to the node. Nothing in Figure 7, the passage cited by the Examiner, or anywhere else in Whitehill discloses or suggests "determining . . . configuration

information," in the manner required by the claims, let that "the determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols as required by claim 8.

Accordingly, claim 9 is patentable over Whitehill for at least the above reasons.

Claims 19 and 29 are similar in relevant respects to the method disclosed in claim 9. Therefore, the Appellant submits that claims 19 and 29 are also allowable over Whitehill at least for the reasons stated above with regard to claim 9.

I. Rejection of Dependent Claim 31

Claim 31 depends on independent claim 21. Therefore, claim 31 is allowable over Whitehill at least for the reasons stated above with regard to claim 21.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claim 31.

J. Rejection of Dependent Claim 32

Claim 32 depends on independent claim 21. Therefore, the Appellant submits that claim 32 is allowable over Whitehill at least for the reasons stated above with regard to claim 21.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claim 32.

II. REJECTIONS UNDER 35 U.S.C. § 103

The MPEP states the following regarding the requirements for establishing a *prima facie* case of obviousness:

The key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been

obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit. The Federal Circuit has stated that "rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

See the MPEP at § 2142, citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006), and *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d at 1396 (quoting Federal Circuit statement with approval). "The mere fact that references can be combined or modified does not render the resultant combination obvious unless the results would have been predictable to one of ordinary skill in the art" *See id.*, § 2143.01. Furthermore, in order to render the claims obvious, the asserted prior art combination must **teach or suggest each and every claim feature**. *See In re Royka*, 490 F.2d 981 (CCPA 1974) (to establish *prima facie* obviousness of a claimed invention, all the claim features must be taught or suggested by the prior art); *see also In re Wada and Murphy*, Appeal 2007-3733, citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995) (A proper obviousness determination requires that an Examiner make "a searching comparison of the claimed invention – **including all its limitations** – with the teaching of the prior art.")

If a *prima facie* case of obviousness is not established, the Appellant has no obligation to submit evidence of nonobviousness:

The examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness.

See MPEP at § 2142.

With these principles in mind, the Appellant now addresses the obviousness rejections.

A. Claims 8, 18 and 28 Are Patentable Over the Proposed Combination of Whitehill and White

Claims 8, 18 and 28 are rejected as being unpatentable under 35 U.S.C. 103(a) over Whitehill in view of White. Claim 8 depends from claim 7, which in turn depends from independent claim 1. Accordingly, claim 8 is patentable over Whitehill at least for the reasons stated above in connection with claims 1 and 7. White does not overcome the above-noted deficiencies with Whitehill. Therefore, claim 8 is patentable over the proposed combination of White and Whitehill at least for the reasons discussed above in connection with claims 1 and 7.

In addition, claim 8 requires “dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.” The Examiner admits that Whitehill fails to teach this claim limitation. (Final Office Action, p. 5.) The Examiner attempts to make up for this deficiency by relying on White. However, in doing so, the Examiner fails to provide “articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” in the detailed manner described in KSR.

Specifically, the Examiner is required to provide “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness.” *See KSR*, 127 S. Ct. at 1741, quoting *In re Kahn*, 441 F.2d at 988. Put another way, the Examiner should “identify a reason that would have prompted a person of ordinary skill in the

relevant field to combine the elements in the way the claimed new invention does.” *KSR*, 127 S. Ct. at 1741. The Examiner should make “explicit” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.” *Id.*

The Examiner attempts to support the proposed combination of Whitehill and White as follows:

[I]t would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the method of dynamically updating the network device as taught by White into the system of Whitehill, **so that it provides a way of approximating the speed of the destination node** (White, see col. 6, Ins.5-10).

(Final Office Action, p. 6.) This conclusory allegation does not provide “articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” in the detailed manner described in *KSR*. The claim limitation at issue requires “dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.” Nevertheless, the Examiner alleges it would be obvious to combine Whitehill and White to “[provide] **a way of approximating the speed of the destination node.**” Appellant fails to see the relevance of approximating the speed of a destination mode to “dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.” Instead, the Examiner appears to propose this combination based solely on improper hindsight.

Hence, it is respectfully submitted that the Examiner has not established a *prima facie* case of obviousness and the Board should withdraw the rejection of claim 8.

Further, even if White and Whitehill are combined, the resulting combination fails to disclose or suggest "dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed," as required by claim 8.

8. In rejecting claim 8, the Examiner states as follows:

However, White discloses "dynamically updating the network device with the communicated information whenever it is determined that at least one network setting corresponding to a location of the network device has changed (col.6, Ins.5-28)."

(Final Office Action, p. 6.) The portion of White that is cited by the Examiner reads as follows:

The speed of the destination node 102 can be approximated by the use of periodic location updates which can provide a time/distance moved delta indicating a general assumption about the rate of movement of the destination node 102. The range of a node 102, 106 or 107 is the size of the area of coverage of a node 102, 106 or 107, and how long a mobile node 102 is inside that coverage area. The length of time that a mobile node 102 is within a coverage area of a node 102, 106 or 107 depends on the portion of the coverage area that the mobile node 102 transverses. For example, assuming that a coverage area can be represented by a sphere, if a mobile node 102 travels through the outer portion of the sphere at a particular rate of travel, the mobile node 102 is only in the coverage area for a brief period of time. However, if the mobile node 102 travels close to or through the center of the sphere at that same rate of travel, the mobile node 102 is within the coverage area for a longer period of time. The rate of movement can be represented by the distance traveled by the node 102 between two points divided by the time for the node to travel between the two points (e.g., if the two points are 1 mile apart and the node travels between them in 1 minute, then the node is traveling at 60 mph).

(White, 6:5-28.) The above passage relates to approximating the speed of a destination node by using periodic location updates. Nothing in this passage or elsewhere discloses or suggest “dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.” In this regard, neither of the references, taken alone or in combination, even discloses network settings that correspond to the location of a network device, let alone dynamically updating the network device when a network setting changes.

Accordingly, claim 8 is patentable over the proposed combination of Whitehill and White for at least the above reasons.

Claims 18 and 28 are similar in relevant respects to the method disclosed in claim 8. Therefore, the Appellant submits that claims 18 and 28 are also allowable over the proposed combination of Whitehill and White at least for the reasons stated above with regard to claim 8.

The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 8, 18 and 28.

B. Claims 10, 20 and 30 Are Patentable Over The Proposed Combination of Whitehill and Augart

Appellant now turns to the rejection of claims 10, 20 and 30 as being unpatentable under 35 U.S.C. 103(a) over Whitehill in view of Augart.

Claim 10 depends from independent claim 1. Accordingly, claim 1 is patentable over Whitehill at least for the reasons stated above in connection with claim 1. Augart does not overcome the above-noted deficiencies with Whitehill. Therefore, claim 10 is

patentable over the proposed combination of White and Augart at least for the reasons discussed above in connection with claim 1.

In addition, claim 10 requires “sending a ping message to at least one network routing device; receiving routing information associated with said ping message; and triangulating locations of network routing devices named in said received routing information to determine said location of said network device.” The Examiner admits that Whitehill fails to disclose at least “sending a ping message to at least one network routing device” and “receiving routing information associated with said ping message,” as required by claim 10. The Examiner attempts to make up for this deficiency by relying on Augart. However, the Examiner again fails to provide “articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” in the detailed manner described in KSR.

The Examiner attempts to support the proposed combination of Whitehill and Augart as follows:

[I]t would have been obvious to one of ordinary skill in the art at the time of applicant's invention to apply the probe packet taught by Augart into the hybrid network of Whitehill in order to determine the maximum additional number of hops using Time-To-Live (TTL) field within the probe packet for routing purpose (Augart, see col.4, ln.56-67).

(Final Office Action, p. 6.) This conclusory allegation does not provide “articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” in the detailed manner described in *KSR*. For example, what is the relevance of “[determining] the maximum additional number of hops using Time-To-Live (TTL) field within the probe packet for routing purpose” relevant to “triangulating locations of network routing devices named in said received routing information to

determine said location of said network device?" It appears that the Examiner is proposing this combination based solely on improper hindsight. Hence, it is respectfully submitted that the Examiner has not established a *prima facie* case of obviousness and the Board should withdraw the rejection of claim 8.

Based on at least the foregoing, the Appellant believes the rejection of independent claims 1, 11 and 21 under 35 U.S.C. § 103(a) as being anticipated by Whitehill has been overcome and requests that the rejection be withdrawn. Additionally, since the additional cited reference (Augart) does not overcome the deficiencies of Whitehill, claims 10, 20 and 30 depend from independent claims 1, 11 and 21, respectively, and are, consequently, also respectfully submitted to be allowable based on the above arguments. The Appellant also reserves the right to argue additional reasons beyond those set forth above to support the allowance of claims 10, 20 and 30.

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CONCLUSION

For at least the foregoing reasons, the Appellant submits that claims 1-32 are in condition for allowance. Reversal of the Examiner's rejection and issuance of a patent on the application are therefore requested.

The Commissioner is hereby authorized to charge \$540 (to cover the Brief on Appeal Fee) and any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: January 26, 2011

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(OIB)

CLAIMS APPENDIX
(37 C.F.R. § 41.37(c)(1)(viii))

1. A method for providing location based configuration in a hybrid wired/wireless network, the method comprising:

identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

determining, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device; and

communicating said determined configuration information to said network device for providing location based configuration of said network device.

2. The method according to claim 1, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.

3. The method according to claim 2, comprising discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.

4. The method according to claim 3, wherein said discovering comprises scanning said database and said memory by said access device, access point and switching device to discover said configuration information.

5. The method according to claim 2, wherein said determining comprises scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information.

6. The method according to claim 5, wherein said RF channel is at least one of a broadcast channel and a setup channel.

7. The method according to claim 1, comprising updating said network device with said communicated configuration information.

8. The method according to claim 7, comprising dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.

9. The method according to claim 1, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.

10. The method according to claim 1, wherein said determining comprises: sending a ping message to at least one network routing device; receiving routing information associated with said ping message; and

triangulating locations of network routing devices named in said received routing information to determine said location of said network device.

11. A machine-readable storage, having stored thereon a computer program having at least one code section for providing location based configuration in a hybrid wired/wireless network testing, the at least one code section executable by a machine for causing the machine to perform the steps comprising:

identifying a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

determining, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device; and

communicating said determined configuration information to said network device for providing location based configuration of said network device.

12. The machine-readable storage according to claim 11, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.

13. The machine-readable storage according to claim 12, comprising code for discovering configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.

14. The machine-readable storage according to claim 13, wherein said discovering code section comprises code for scanning said database and said memory by said access device, access point and switching device to discover said configuration information.

15. The machine-readable storage according to claim 12, wherein said determining code section comprises code for scanning at least one RF channel by at least one of said access point and said access device to discover said configuration information.

16. The machine-readable storage according to claim 15, wherein said RF channel is at least one of a broadcast channel and a setup channel.

17. The machine-readable storage according to claim 11, comprising code for updating said network device with said communicated configuration information.

18. The machine-readable storage according to claim 17, comprising code for dynamically updating said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.

19. The machine-readable storage according to claim 11, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.

20. The machine-readable storage according to claim 11, wherein said determining code section comprises code for:

 sending a ping message to at least one network routing device;
 receiving routing information associated with said ping message; and
 triangulating locations of network routing devices named in said received routing information to determine said location of said network device.

21. A system for providing location based configuration in a hybrid wired/wireless network, the system comprising:

 an identifier adapted to identify a location of a network device within the hybrid wired/wireless network, the network device being movable within the hybrid wired/wireless network;

 a determinator adapted to determine, outside of said network device, configuration information for said network device, said configuration information corresponding to said determined location of said network device; and

 a communicator adapted to communicate said determined configuration information to said network device for providing location based configuration of said network device.

22. The system according to claim 21, wherein said network device is selected from the group consisting of an access device, an access point and a switching device.

23. The system according to claim 22, comprising a discoverer adapted to discover configuration information from at least one of a database, and a memory associated with at least one of said access point and said switching device.

24. The system according to claim 23, comprising a scanner adapted to scan said database and said memory by said access device, access point and switching device to discover said configuration information.

25. The system according to claim 22, comprising a scanner adapted to scan at least one RF channel by at least one of said access point and said access device to discover said configuration information.

26. The system according to claim 25, wherein said RF channel is at least one of a broadcast channel and a setup channel.

27. The system according to claim 21, comprising an updater adapted to update said network device with said communicated configuration information.

28. The system according to claim 27, wherein said updater may be adapted to dynamically update said network device with said communicated information whenever it is determined that at least one network setting corresponding to a location of said network device has changed.

29. The system according to claim 21, wherein said determined information is at least one of bandwidth etiquette and sharing rules, channel availability, preferred channel, and available communication protocols.

30. The system according to claim 21, comprising:

- a sender adapted to send at least one ping message to a at least one network routing device;
- a receiver adapted to receive routing information associated with said ping message; and
- a triangulator adapted to triangulate locations of network routing devices named in said received routing information to determine said location of said network device.

31. The system according to claim 21, comprising at least one querying agent for querying a network device for location information.

32. The system according to claim 22, comprising at least one informing agent for informing at least one of said access point, access device and switching device of at least one network parameter related to location based configuration.

EVIDENCE APPENDIX
(37 C.F.R. § 41.37(c)(1)(ix))

- (1) United States Patent No. 7,200,673 ("Augart"), entered into record by the Examiner in the April 30, 2007 Office Action.
- (2) United States Patent No. 7,042,867 ("Whitehill"), entered into record by the Examiner in the October 26, 2010 Office Action.
- (3) United States Patent No. 7,433,691 ("White"), entered into record by the Examiner in the October 26, 2010 Office Action.

RELATED PROCEEDINGS APPENDIX
(37 C.F.R. § 41.37(c)(1)(x))

The Appellant is unaware of any related appeals or interferences.